



#7

SEQUENCE LISTING

<110> CHODOSH, Lewis
GARDNER, H

<120> PREGNANCY UP-REGULATED, NONUBIQUITOUS CaM KINASE

<130> 22253-70422

<140> 10/032,254

<141> 2001-12-21

<150> 60/257,073

<151> 2000-12-21

<160> 8

<170> PatentIn Ver. 2.1

<210> 1

<211> 1554

<212> DNA

<213> Murinae gen. sp.

<400> 1

```
gttgcgaggt ccctccactc cgaggcgcca ggggccaagc agcgattagg tggctgcgtg 60
ggtgactgtg gtcgtgacag gtggtgcaa gcagggtcgc agacatgctg ctgctcaaga 120
aacagacgga ggacatcagc agtgtctatg agatccggga gaagctgggc tcgggtgcct 180
tctctgaggt gatgctggcc caggaaaggg gctctgctca tcttgtggcc ctcaagtga 240
ttcccaagaa agcacttcgg ggcaaggagg ccctggtgga gaatgagatc gcggtacttc 300
gcagaatcag ccatcccaac attgtggctc tggaggacgt ccatgagagt ccttctcatc 360
tctacttggc catggagctg gtaacagggt gtgaactgtt tgaccgcac atggagcggg 420
gctcctacac agagaaggac gccagccacc ttgtagggca ggtccttggc gctgtctcct 480
accttcatag cctgggcatc gtgcaccggg acctcaagcc tgaaaacctc ctctatgcca 540
caccttttga ggactccaag atcatggtct ctgacttttg cctgtccaaa atacaagctg 600
gcaacatgct aggcacagcc tgtgggaccc caggatatgt ggcccagag ctcttgagc 660
agaaacccta cgggaaggcc gtagatgtgt gggccctggg tgtcatctcc tacatcctgc 720
tgtgtgggta ccccccttc tatgatgaga gogatcctga actcttcagc cagattctga 780
gggccagcta tgagtttgac tccccctttt gggatgacat ctcagaatca gccaaagact 840
tcattcgcca ccttctggaa cgtgatcccc agaagagggt cacctgccag caggccctac 900
agcatctttg gatctctggg gatgcagcct tcgataggga catcctgggt tctgtcagt 960
agcagatcca gaagaatttt gccaggaccc actggaagcg tgcattcaat gccacatcat 1020
tcctacgtca catccgtaag ctgggacaaa gccagagggt tgaggaggcc tccaggcagt 1080
gtatgaccog tcatagccac ccaggccttg ggactagcca gtccccaag tggtgaaaac 1140
caggtagatg ccaaggaagg ccaagtggac tgactcccgg tttttctttc ctccagccct 1200
tttggctctt ttcttgatc cttgtctctc agactggcct ctgctggaaa gtctgagact 1260
gggtgtgatg catggcacta gggtagggg cttccccagt atgtcccca gcctctattc 1320
ttacctatgg tggaggctcc ctttcccatg tcgctgccac cctctatgga aactgaggag 1380
```

gtgttcaaaa gtggacttgg gagccatcct tcctgcacct tgcacgaaca catgcattgt 1440
 gtggctgttc tgtgctttgc tgactgtggg tggtcctgct tgtgttgtgg cccttttagtt 1500
 cctccttttc ctaaccaata aagacaaaca gaaccaaaaa aaaaaaaaaa aaaa 1554

<210> 2
 <211> 343
 <212> PRT
 <213> Murinae gen. sp.

<400> 2
 Met Leu Leu Leu Lys Lys Gln Thr Glu Asp Ile Ser Ser Val Tyr Glu
 1 5 10 15
 Ile Arg Glu Lys Leu Gly Ser Gly Ala Phe Ser Glu Val Met Leu Ala
 20 25 30
 Gln Glu Arg Gly Ser Ala His Leu Val Ala Leu Lys Cys Ile Pro Lys
 35 40 45
 Lys Ala Leu Arg Gly Lys Glu Ala Leu Val Glu Asn Glu Ile Ala Val
 50 55 60
 Leu Arg Arg Ile Ser His Pro Asn Ile Val Ala Leu Glu Asp Val His
 65 70 75 80
 Glu Ser Pro Ser His Leu Tyr Leu Ala Met Glu Leu Val Thr Gly Gly
 85 90 95
 Glu Leu Phe Asp Arg Ile Met Glu Arg Gly Ser Tyr Thr Glu Lys Asp
 100 105 110
 Ala Ser His Leu Val Gly Gln Val Leu Gly Ala Val Ser Tyr Leu His
 115 120 125
 Ser Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Tyr
 130 135 140
 Ala Thr Pro Phe Glu Asp Ser Lys Ile Met Val Ser Asp Phe Gly Leu
 145 150 155 160
 Ser Lys Ile Gln Ala Gly Asn Met Leu Gly Thr Ala Cys Gly Thr Pro
 165 170 175
 Gly Tyr Val Ala Pro Glu Leu Leu Glu Gln Lys Pro Tyr Gly Lys Ala
 180 185 190
 Val Asp Val Trp Ala Leu Gly Val Ile Ser Tyr Ile Leu Leu Cys Gly

195 200 205
 Tyr Pro Pro Phe Tyr Asp Glu Ser Asp Pro Glu Leu Phe Ser Gln Ile
 210 215 220
 Leu Arg Ala Ser Tyr Glu Phe Asp Ser Pro Phe Trp Asp Asp Ile Ser
 225 230 235 240
 Glu Ser Ala Lys Asp Phe Ile Arg His Leu Leu Glu Arg Asp Pro Gln
 245 250 255
 Lys Arg Phe Thr Cys Gln Gln Ala Leu Gln His Leu Trp Ile Ser Gly
 260 265 270
 Asp Ala Ala Phe Asp Arg Asp Ile Leu Gly Ser Val Ser Glu Gln Ile
 275 280 285
 Gln Lys Asn Phe Ala Arg Thr His Trp Lys Arg Ala Phe Asn Ala Thr
 290 295 300
 Ser Phe Leu Arg His Ile Arg Lys Leu Gly Gln Ser Pro Glu Gly Glu
 305 310 315 320
 Glu Ala Ser Arg Gln Cys Met Thr Arg His Ser His Pro Gly Leu Gly
 325 330 335
 Thr Ser Gln Ser Pro Lys Trp
 340

<210> 3

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:degenerate
 oligonucleotide primer PTKIa

<220>

<221> misc_feature

<222> (17)

<223> n is a, c, g, or t

<400> 3

gggcccggat ccacmgngay y

<210> 4
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:degenerate
oligonucleotide primer PTKIIa

<400> 4
cccggggaat tccawaggac casacrtc 28

<210> 5
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:degenerate
oligonucleotide primer BSTKIa

<400> 5
gggcccggat ccrtrcacmg vgacy 25

<210> 6
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:degenerate
oligonucleotide primer BSTKIIa

<400> 6
cccggggaat tccrwarctc casacatc 28

<210> 7
<211> 1412
<212> DNA
<213> Homo sapiens

<400> 7
atgctgctgc tgaagaaaca cacggaggac atcagcagcg tctacgagat ccgcgagagg 60
ctcggctcgg gtgccttctc cgagggtggtg ctggcccagg agcggggctc cgcacacctc 120
gtggccctca agtgcacccc caagaaggcc ctccggggca aggaggccct ggtggagaac 180

gagatcgag tgctccgtag gatcagtcac cccaacatcg tcgctctgga ggatgtccac 240
gagagccctt cccacctcta cctggccatg gaactggtga cgggtggcga gctgtttgac 300
cgcatcatgg agcgcggtc ctacacagag aaggatgcca gccatctggt gggtcaggtc 360
cttggcgccg tctcctacct gcacagcctg gggatcgtgc accgggacct caagcccga 420
aacctcctgt atgccacgcc ctttgaggac tcgaagatca tggctcttga ctttggactc 480
tccaaaatcc aggtgaggaa catgctagga accgcctgtg ggacccttg atagtgtggc 540
ccagagctct tggagcagaa accctacggg aaggccgtag atgtgtgggc cctgggcgtc 600
atctcctaca tctgtgtgtg tgggtacccc cccttctacg acgagagcga ccctgagctc 660
ttcagccaga tctgtagggc cagctatgag tttgactctc ctttctggga tgacatctca 720
gaatcagcca aagacttcat ccggcacctt ctggagcag acccccagaa gaggttcacc 780
tgccaacagg ccttgccgga cctttggatc tctggggaca cagccttcga caggacatc 840
ttaggtcttg tcagttagca gatccggaag aactttgctc ggacacactg gaagcgagcc 900
ttcaatgcca cctcgttcct gcgccacatc cggaagctgg ggcagatccc agagggcgag 960
ggggcctctg agcagggcat ggcccggcac agccactcag gcctccgtgc tggccagccc 1020
cccaagtggg gatgcccagg cagatgccga ggccaagtgg actgaccccc agatttcctt 1080
cccttgatg ctttcgggtc cctcccccaa ccctccccc tgggtctggc ctctgctgga 1140
ttttgagatt tgaggggtgtg gcgcatggcg ctgggggttg aatggggcac cccaagtct 1200
gtccccaggc tctgccctgc ctgggggagc tggctccct ccctgttg cctctccgcc 1260
cctgcccccc ccgccccgcc aaaagccgag ggggtgctgg caggcggg ccaggggctg 1320
tctttcctgc acggctgttg tgtgcttcgc tgagtgtggg tggctctgct tgtgtcatgg 1380
tcatggcctt ccagccccct ccagttttcc cc 1412

<210> 8

<211> 343

<212> PRT

<213> Homo sapiens

<400> 8

Met Leu Leu Leu Lys Lys His Thr Glu Asp Ile Ser Ser Val Tyr Glu
1 5 10 15

Ile Arg Glu Arg Leu Gly Ser Gly Ala Phe Ser Glu Val Val Leu Ala
20 25 30

Gln Glu Arg Gly Ser Ala His Leu Val Ala Leu Lys Cys Ile Pro Lys
35 40 45

Lys Ala Leu Arg Gly Lys Glu Ala Leu Val Glu Asn Glu Ile Ala Val
50 55 60

Leu Arg Arg Ile Ser His Pro Asn Ile Val Ala Leu Glu Asp Val His
65 70 75 80

Glu Ser Pro Ser His Leu Tyr Leu Ala Met Glu Leu Val Thr Gly Gly
85 90 95

Glu Leu Phe Asp Arg Ile Met Glu Arg Gly Ser Tyr Thr Glu Lys Asp

	100		105		110
Ala Ser His Leu Val Gly Gln Val Leu Gly Ala Val Ser Tyr Leu His					
	115		120		125
Ser Leu Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Tyr					
	130		135		140
Ala Thr Pro Phe Glu Asp Ser Lys Ile Met Val Ser Asp Phe Gly Leu					
	145		150		155
					160
Ser Lys Ile Gln Ala Gly Asn Met Leu Gly Thr Ala Cys Gly Thr Pro					
		165		170	175
Gly Tyr Val Ala Pro Glu Leu Leu Glu Gln Lys Pro Tyr Gly Lys Ala					
	180		185		190
Val Asp Val Trp Ala Leu Gly Val Ile Ser Tyr Ile Leu Leu Cys Gly					
	195		200		205
Tyr Pro Pro Phe Tyr Asp Glu Ser Asp Pro Glu Leu Phe Ser Gln Ile					
	210		215		220
Leu Arg Ala Ser Tyr Glu Phe Asp Ser Pro Phe Trp Asp Asp Ile Ser					
	225		230		235
					240
Glu Ser Ala Lys Asp Phe Ile Arg His Leu Leu Glu Arg Asp Pro Gln					
		245		250	255
Lys Arg Phe Thr Cys Gln Gln Ala Leu Arg His Leu Trp Ile Ser Gly					
	260		265		270
Asp Thr Ala Phe Asp Arg Asp Ile Leu Gly Ser Val Ser Glu Gln Ile					
	275		280		285
Arg Lys Asn Phe Ala Arg Thr His Trp Lys Arg Ala Phe Asn Ala Thr					
	290		295		300
Ser Phe Leu Arg His Ile Arg Lys Leu Gly Gln Ile Pro Glu Gly Glu					
	305		310		315
					320
Gly Ala Ser Glu Gln Gly Met Ala Arg His Ser His Ser Gly Leu Arg					
		325		330	335
Ala Gly Gln Pro Pro Lys Trp					
	340				